

REMARKS

Initially, Applicant would like to thank the Examiner for acknowledging receipt and consideration of each of the references submitted with the Information Disclosure Statement filed on March 18, 2002, as indicated by his signature on the PTO Form-1449 that was attached thereto and by his initials next to the listings for each reference cited therein. Applicant would also like to thank the Examiner for acknowledging Applicant's claim for foreign priority under 35 U.S.C. §119, as well as receipt of all of the priority documents upon which the claim for foreign priority is based.

In the above-noted Official Action, claims 1-3 and 8-10 were rejected under 35 U.S.C. §103(a) over LISKOW (U.S. Patent No. 5,847,832) in view of KUSHIDA (U.S. Patent No. 4,675,529). Claims 4-7, 11 and 12 were rejected under 35 U.S.C. §103(a) over LISKOW in view of KUSHIDA, and further in view of MALEK (U.S. Patent No. 4,915,498).

Upon entry of the present amendment, claim 1 will have been amended to include features originally recited in claim 4. Claims 5 and 7 will have been amended to depend from amended claim 1. In view of the herein-contained amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of each of the outstanding rejections, as well as an indication of the allowability of each of the claims now pending, in due course.

In this regard, amended claim 1 is directed to "An electronic endoscope provided with a three-dimensional image capturing device" The electronic endoscope of claim 1 includes "a flexible tube... that has an optic fiber along which at least one of said distance-measuring light beam and said first reflected

light beam is transmitted; and a three-dimensional image sensing processor that controls the accumulating operation of said distance-measurement imaging device in accordance with the length of said fiber, to generate electric charges corresponding to a three-dimensional image of said subject”.

With respect to the features formerly recited in claim 4, the outstanding Official Action admits that “Liskow is silent as to controlling the processor in accordance with the length of said optic fiber”. However, the outstanding Official Action asserts that “it was well known in the art that a 3D image can be made by detecting the variations in the time it takes light to reflect back to a CCD... [s]ee Malek figure 3 and column 7 lines 42 through column 8 line 65”.

In this regard, Applicant first notes that the above-noted assertion does not address the features formerly recited in claim 4 which are now recited in claim 1. Rather, amended claim 1 recites “a three-dimensional image sensing processor that controls the accumulating operation... in accordance with the length of said fiber” (emphasis added). Thus, even if the assertion in the Official Action is taken as true, it does not address the features formerly recited in claim 4 which are now recited in claim 1.

In any case, MALEK discloses, at col. 7, line 42 to column 8, line 65, that a laser driver circuit 3 is used to generate proper voltage and current for a solid state laser 2. A timing system circuit 4 controls a CCD interface circuit 6 that can read data from the individual picture elements in the CCD. However, MALEK does not disclose that the CCD interface circuit 6 controls the “accumulating operation of said distance-measurement imaging device in accordance with the length of said fiber” as recited in

amended claim 1. Nor does MALEK disclose any other component that performs such a function in accordance with the length of a fiber.

Further with respect to the features formerly recited in claim 4, the outstanding Official Action also asserts that "it was well known in the art that the time it takes for the light to propagate back to a CCD via a fiber optic tube is dependent upon the length of the fiber... [s]ee Kushida column 3 lines 30-62." In this regard, Applicant again notes that the above-noted assertion does not address the features formerly recited in claim 4 which are now recited in claim 1. Rather, amended claim 1 recites "a three-dimensional image sensing processor that controls the accumulating operation... in accordance with the length of said fiber". Thus, even if the assertion in the Official Action is taken as true, it does not address the features formerly recited in claim 4 which are now recited in claim 1.

In any case, KUSHIDA discloses, at column 3, lines 30-62, that a propagation time varies with the wavelength of the transmitted light. Further, KUSHIDA discloses that the second optical fiber 4 should have a length such that the time difference ΔT is longer than the time width of the fluorescent light pulse. However, KUSHIDA does not disclose that an accumulating operation is controlled in accordance with the length of a fiber. Nor does KUSHIDA disclose a "three-dimensional image sensing processor that controls the accumulating operation of said distance measurement imaging device"

Accordingly, Applicants respectfully submit that neither MALEK or KUSHIDA discloses or suggests "a three-dimensional image sensing processor that controls the accumulating operation of said distance-measurement imaging device in accordance with the length of said fiber", as is recited in claim 1. Additionally, the outstanding Official

Action admits that the above-noted features previously recited in claim 4 are not disclosed or suggested by LISKOW. Accordingly, none of the references applied in the outstanding Official Action (nor any proper combination of these references) discloses, suggests or renders obvious the combination of features recited in amended claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. §103. Applicants further submit that each of claims 2-3 and 5-12 is allowable, at least for depending, directly or indirectly, from an allowable claim 1, as well as for additional reasons related to their own recitations.

Accordingly, for all of the reasons noted above, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-12 under 35 U.S.C. §103 over LISKOW in view of KUSHIDA, and/or further in view of MALEK.

Further, if the above-noted rejections are maintained, Applicant respectfully requests an indication with specificity of exactly where the above-noted features recited in amended claim 1 are believed to be disclosed or suggested in the references. In particular, Applicant respectfully requests a specific indication of which feature of the references is believed to disclose a “three-dimensional image sensing processor” as recited in claim 1.

SUMMARY AND CONCLUSION

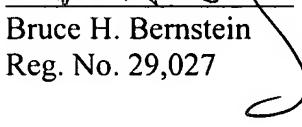
In view of the fact that none of the art of record, whether considered alone or in combination, discloses or suggests the present invention as defined by the claims, and in further view of the above remarks, reconsideration of the Examiner's action and allowance of the present application is respectfully requested and is believed to be appropriate.

Any amendments to the claims in this amendment which have not been specifically noted to overcome a rejection based upon the prior art should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

If there should be any questions concerning this application, the Examiner is invited to contact the undersigned at the telephone number listed below.

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